



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF

Art Unit: 1643

LEBEL ET AL.

APPLICATION NO: 10/648,984

FILED: August 27, 2003

FOR: EXPRESSION OF TREHALOSE BIOSYNTHETIC GENES IN PLANTS

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants believe this paper is being filed before the mailing date of a first Office Action on the merits, and so under 37 C.F.R. §1.97(b)(3) no fees are required. If a fee is deemed to be required, the Commissioner is hereby authorized to charge such fee to Deposit Account No. 19-0134.

In accordance with 37 C.F.R. §1.56, applicants wish to call the Examiner's attention to the references cited on the attached form(s) PTO-1449. The submission of these reference lists is made solely for the purpose of complying with Applicant's duty of disclosure, and is not intended as a surrender of patentable subject matter nor is it intended to create prosecution history estoppel.

Copies of these references are not enclosed since they were provided in the parent application no. 09/262,615.

The Examiner is requested to consider the foregoing information in relation to this application and indicate that each reference was considered by returning a copy of the initialed PTO 1449 form(s).

Respectfully submitted,

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Date: August 4, 2004

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO.  
30427USDIV2  
APPLICATION NO.  
10/648,984  
APPLICANT  
Lebel et al.  
FILING DATE  
Aug. 27, 2003

Group  
1649

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	AA	5,422,254	6/6/95	Londesborough et al.	435	097	2/28/92
	AB	5,792,921	8/11/98	Londesborough et al	800	205	8/15/95
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	OFFICE	CLASS	SUBCLASS	TRANSLATION YES	NO
	AM	WO 95/01446	1/12/95	PCT			<input type="checkbox"/>	<input type="checkbox"/>
	AN	WO 96/00789	1/11/96	PCT			<input type="checkbox"/>	<input type="checkbox"/>
	AO	WO 97/42327	11/13/97	PCT			<input type="checkbox"/>	<input type="checkbox"/>
	AP						<input type="checkbox"/>	<input type="checkbox"/>
	AQ						<input type="checkbox"/>	<input type="checkbox"/>

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

AR	Blazquez, M. A. et al., "Isolation and molecular characterization of the Arabidopsis TPS1 gene, encoding trehalose-6-phosphate synthase," Plant Journal, 13(5): pp685-689 (1998)
AS	Goddijn, O. J. M. et al. "Inhibition of Trehalose Activity Enhances Trehalose Accumulation in Transgenic Plants," Plant Physiology, 113: pp181-190 (1997)
AT	Holmstrom, K-O., "Drought tolerance in tobacco," Nature, 379: pp683-684 (1996)

EXAMINER	DATE CONSIDERED
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\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

FORM PTQ-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

	AA2	Kaasen, I. et al., "Analysis of the otsBA operon for osmoregulatory trehalose synthesis in Escherichia coli and homology of the OtsA and OtsB proteins to the yeast trehalose-6-phosphate synthase/phosphatase complex," Gene, 145: pp9-15 (1994)
	AB2	Kassen, I. et al., "Molecular Cloning and Physical Mapping of the otsBA Genes, Which Encode the Osmoregulatory Trehalose Pathway of Escherichia coli: Evidence that Transcription Is Activated by KatF (AppR)," Journal of Bacteriology, 174(3): pp889-898 (1992)
.	AC2	Lebel, E. et al., "Chemical Regulation of Transgene Expression in Plants," Abstract for Biochemical Society Symposium: Engineering Crops for Industrial Ends in Bristol, UK (1996)
.	AD2	Muller, J. et al., "Pools of non-structural carbohydrates in soybean root nodules during water stress," Physiologia Plantarum, 98: pp723-730 (1996)
.	AE2	Muller, J. et al., "Trehalose and trehalase in plants: recent developments," Plant Science, 112:pp1-9 (1995)
	AF2	Pilon-Smits, E. A. H. et al., "Trehalose-Producing Transgenic Tobacco Plants Show Improved Growth Performance Under Drought Stress," Journal of Plant Physiology, 152: pp.525-532 (1998)
	AG2	Romero, C. et al., "Expression of yeast trehalose-6-phosphate synthase gene in transgenic tobacco plants: pleiotropic phenotypes include drought tolerance," Planta, 201: pp293-297 (1997)
	AH2	Salminen, S. O. et al., "Enzymes of a,a-Trehalose Metabolism in Soybean Nodules," Plant Physiology, 81: pp538-541
	AI2	Vogel, G. et al., "Trehalose-6-phosphate phosphatases from Arabidopsis thaliana: identification by functional complementation of the yeast tps2 mutant," Plant Journal, 13(5): pp673-683 (1998)
	AJ2	Vuorio, O. E. et al., "Cloning of two related genes encoding the 56-kDa and 123-kDa subunits of trehalose synthase from the yeast Saccharomyces cerevisiae," Eur. Journal of Biochemistry, 216: 849-861 (1993)
	AK2	
	AL2	
	AM2	
	AN2	

EXAMINER

DATE CONSIDERED

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FORM PTO-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE**INFORMATION DISCLOSURE CITATION**

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1643**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
	AL						

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	OFFICE	CLASS	SUBCLASS	TRANSLATION YES	NO
	AM	9317093	9/2/93	WO			<input type="checkbox"/>	<input type="checkbox"/>
	AN	9514098	5/26/95	WO			<input type="checkbox"/>	<input type="checkbox"/>
	AO	9524492	9/14/95	WO			<input type="checkbox"/>	<input type="checkbox"/>
	AP	9803536	1/29/98	WO			<input type="checkbox"/>	<input type="checkbox"/>
	AQ						<input type="checkbox"/>	<input type="checkbox"/>

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent pages, Etc.)

AR	Heifetz et al., Plant Physiology, 114(3):308 August 1997
AS	
AT	

**EXAMINER****DATE CONSIDERED**

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Attorney Docket No. 30427USDIV2  
Serial No. 10/648,984



**FILING BY "FIRST CLASS MAIL" UNDER 37 C.F.R. § 1.8**

I hereby certify that the following correspondence is being deposited with the United States Postal Service as "First Class Mail" with proper postage in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on August 4, 2004.

- 1) Information Disclosure Statement
- 2) Form PTO-1449
- 3) Return Postcard

Melissa Hardy

Name

A handwritten signature in black ink that reads "Melissa Hardy".

Signature